

## ABSTRACT

A method and device for determining reflection lens pupil transmission distribution in a photolithographic reflective imaging system, the device including an illumination source; a reticle supporting a reflective mask layer having a plurality of light-reflecting areas and non-reflecting areas thereon; a diffuser mounted with respect to the reflective mask layer; a lens system including one or more reflective elements; and an image plane, in which a pupil image corresponding to one or more of the plurality of light-reflecting areas in the reflective mask layer is formed at or near the image plane when light from the illumination source passes through the diffuser to the reflective mask layer, reflects from the light-reflecting areas and passes through the lens system, the pupil image having a reflection lens pupil transmission distribution. The method includes obtaining a pupil image with and without the diffuser in place in the device.